Abstract of the Disclosure

A combined emission tomography and computer tomography (ET/CT unit) is for imaging an object to be examined, and a method is for producing ET images of an object to be examined with the aid of a combined ET/CT In the method, account is taken during unit. of production the ETimages of the spatial distribution, measured by the CT, of the attenuation coefficients in the measuring field of the CT in order the measured ETimage. Attenuation to correct coefficients of the object that are disposed outside the measuring field are determined by extrapolation of detector channels and likewise used to correct the ET images.